Media Release
Chiefs of Staff, News Directors
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Draining of lake showcases geological goldmine

A once-in-a-lifetime opportunity to study some of the state’s oldest rock formations has been captured by University of Tasmania geologists.

The recent draining of Lake Rowallan in northern Tasmania has exposed a geological goldmine with 1 billion year old Precambrian rocks now visible for the first time in 20,000 years.

Dr Rob Scott from the ARC Centre of Excellence in Ore Deposits (CODES) said geologists and researchers now have an unprecedented view of the Precambrian rocks as they were, when originally exposed, during the last ice age.

Dr Scott said Geology Honours student Sally Mattner is studying the deformation and metamorphic history of the newly exposed Precambrian rocks.

“The research is important because the Precambrian rocks (now briefly) exposed in this area record what is arguably the biggest and most significant geological event to have ever affected the state – a collision between a fragment of continental crust, which now forms the basement to modern Tasmania, and an ancient oceanic volcanic arc,” Dr Scott said.

“What we can learn in Tasmania has implications for the geological development of the whole of eastern Australia at this time, but we have the advantage of being able to obtain hard data to help us understand exactly what happened.”

The outcrops now exposed on the lake bed will only be accessible for a limited time before the lake is refilled as Hydro Tasmania is upgrading the dam (Rowallan Dam).

Ms Mattner is capturing detailed geological information in 3D pictures using new technology adapted for geology by Dr Michael Roach, a senior lecturer at CODES.

She has acquired detailed 3D imagery of outcrops and gained a permanent 3D pictorial representation of key structures in the area.

Dr Roach was awarded a $227,000 from the Federal Government’s Office of Learning and Teaching (OLT) last year to develop visualisation technology and associated teaching and learning content to enhance and extend field-based activities. The project is in partnership
with the University of Western Australia, Australian National University, University of Queensland and the University of Melbourne.

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